

## TRAFFIC ON I-5 SOUTH OF ORANGE COUNTY/SAN DIEGO COUNTY BORDER

Traffic numbers for the portion of I-5 south at the south end of the project study area are presented in the Appendices of the South Orange County Transportation Infrastructure Improvement Project (SOCTIIP) Traffic and Circulation Technical Report (December 2003). The data for this segment of I-5 are summarized in the attached tables and figures, in response to a request for information from the California Coastal Commission staff.

The area south of Orange County/San Diego County border is located on Marine Corps Base Camp Pendleton (MCB Camp Pendleton). There are no interchanges south of the Basilone ramp until the Las Pulgas interchange on MCB Camp Pendleton, approximately 10 miles south of the County line. (The Las Pulgas interchange is located on MCB Camp Pendleton and serves military traffic and very limited nonmilitary traffic.) Base-related traffic is a small portion of the overall traffic on I-5; therefore, traffic on I-5 south of Basilone Road through MCB Camp Pendleton is expected to be essentially the same as the traffic at the Basilone interchange. Traffic levels would substantially change on I-5 until south of MCB Camp Pendleton, in Oceanside.

Table A summarizes the level of service on I-5 (existing conditions, without project, and with project) within the Coastal Zone of the Preferred Alternative. This table shows that the future (2025) level of service (LOS) on this segment of I-5 is expected to worsen under the No Action Alternatives compared to existing conditions. Compared to the No Action Alternatives, the Preferred Alternative will result in improved LOS within the Coastal Zone.

Tables B, C, and D show the LOS, intersection capacity utilization (ICU), and intersection delay for the on- and off-ramps at I-5 at Cristianitos Road and I-5 at Basilone Road. These tables show that the traffic conditions expressed by LOS, ICU, and delay at these interchanges will improve with implementation of the Preferred Alternative.

The average daily traffic (ADT) for the existing conditions and with the Preferred Alternative on I-5 in the vicinity of Cristianitos Road and Basilone Road are shown on the attached figures.

A unique characteristic of the SOCTIIP study area is the weekend traffic pattern on I-5 in the southernmost part of the study area. Daily and peak-hour traffic volumes across the Orange County/San Diego County border are 30 to 50 percent higher on weekend days than on weekdays. It is anticipated that this trend would continue in the future. The FTC-S is expected to reduce weekend traffic volumes and congestion on I-5 compared to the No Action Alternative, except on I-5 south of the Orange/San Diego County border. FTC-S would result in little change to traffic levels south of the County border.

As part of the SOCTIIP traffic and circulation study, a capacity evaluation was carried out for the confluence that would be created between the FTC-S and I-5. The intent was to determine whether or not the FTC-S/I-5 confluence will result in a congested interchange. The confluence of the proposed FTC-S and I-5, south of the Basilone Road/I-5 interchange in San Diego County, consists of transition ramps to southbound I-5 and from northbound I-5. The transition ramps between I-5 and the FTC-S toll road and the segments of I-5 north and south of the FTC-S confluence are forecast to operate at an acceptable LOS under long-range (2025) weekday traffic conditions. Also, the conceptual design for the connection to I-5 does not create any weaving or merging areas at existing I-5 interchanges north and south of the FTC-S/I-5 confluence that would degrade the forecasted LOS. Therefore, the FTC-S/I-5 connection is not expected to cause a congested interchange situation on I-5 in the southern Orange County and northern San Diego County area.

**TABLE A**  
**COASTAL ZONE FREEWAY/TOLLWAY MAINLINE LEVEL OF SERVICE (LOS) SUMMARY**

Location	Direction	AM Peak Hour			PM Peak Hour		
		Volume	V/C	LOS	Volume	V/C	LOS
Existing							
I-5 north of Cristianitos	Northbound	4,060	0.51	C	4,070	0.51	C
I-5 south of Cristianitos	Northbound	3,750	0.47	B	3,810	0.48	B
I-5 south of Basilone	Northbound	3,830	0.48	B	3,360	0.42	B
I-5 north of Cristianitos	Southbound	3,410	0.43	B	4,400	0.55	C
I-5 south of Cristianitos	Southbound	3,210	0.40	B	4,070	0.51	B
I-5 south of Basilone	Southbound	2,890	0.36	B	4,130	0.52	B
2025 No Action: Committed Circulation System with Proposed RMV Plan							
I-5 north of Cristianitos	Northbound	6,830	0.85	D	7,350	0.92	E
I-5 south of Cristianitos	Northbound	6,970	0.87	D	7,310	0.91	E
I-5 south of Basilone	Northbound	7,050	0.88	D	6,860	0.86	D
I-5 north of Cristianitos	Southbound	6,140	0.77	D	7,460	0.93	E
I-5 south of Cristianitos	Southbound	6,110	0.76	D	7,550	0.94	E
I-5 south of Basilone	Southbound	5,790	0.72	D	7,610	0.95	E
2025 No Action: Buildout Circulation System with Proposed RMV Plan							
I-5 north of Cristianitos	Northbound	6,830	0.85	D	7,350	0.92	E
I-5 south of Cristianitos	Northbound	6,970	0.87	D	7,310	0.91	E
I-5 south of Basilone	Northbound	7,050	0.73	D	6,860	0.71	C
I-5 north of Cristianitos	Southbound	6,140	0.77	D	7,450	0.93	E
I-5 south of Cristianitos	Southbound	6,110	0.76	D	7,550	0.94	E
I-5 south of Basilone	Southbound	5,790	0.60	C	7,610	0.79	D
Preferred Alternative: Committed Circulation System with Proposed RMV Plan							
I-5 north of Cristianitos	Northbound	4,930	0.62	C	5,570	0.70	C
I-5 south of Cristianitos	Northbound	4,790	0.60	C	5,190	0.65	C
I-5 south of Basilone	Northbound	7,050	0.88	D	6,860	0.86	D
I-5 north of Cristianitos	Southbound	5,110	0.64	C	4,950	0.62	C
I-5 south of Cristianitos	Southbound	4,980	0.62	C	4,900	0.61	C
I-5 south of Basilone	Southbound	5,790	0.72	D	7,610	0.95	E
Preferred Alternative: Buildout Circulation System with Proposed RMV Plan							
I-5 north of Cristianitos	Northbound	5,170	0.65	C	5,840	0.73	D
I-5 south of Cristianitos	Northbound	5,070	0.63	C	5,480	0.69	C
I-5 south of Basilone	Northbound	7,050	0.73	D	6,860	0.71	C
I-5 north of Cristianitos	Southbound	5,310	0.66	C	5,300	0.66	C
I-5 south of Cristianitos	Southbound	5,220	0.65	C	5,320	0.67	C
I-5 south of Basilone	Southbound	5,790	0.60	C	7,610	0.79	D

**TABLE B**  
**COASTAL ZONE FREEWAY/TOLLWAY RAMP LEVEL OF SERVICE (LOS) SUMMARY**

Interchange	Ramp	AM Peak Hour			PM Peak Hour		
		Volume	V/C	LOS	Volume	V/C	LOS
Existing							
I-5 at Cristianitos	SB On-ramp	120	0.08	A	250	0.17	A
	NB On-ramp	200	0.13	A	220	0.15	A
	SB Off-ramp	160	0.11	A	180	0.12	A
	NB On-ramp	290	0.19	A	180	0.12	A
I-5 at Basilone	SB On-ramp	60	0.04	A	380	0.25	A
	NB On-ramp	250	0.17	A	570	0.38	A
	SB Off-ramp	380	0.25	A	320	0.21	A
	NB On-ramp	330	0.22	A	120	0.08	A
2025 No Action: Committed Circulation System with Proposed RMV Plan							
I-5 at Cristianitos	SB On-ramp	120	0.08	A	250	0.17	A
	NB On-ramp	130	0.09	A	220	0.15	A
	SB Off-ramp	160	0.11	A	130	0.09	A
	NB On-ramp	290	0.19	A	180	0.12	A
I-5 at Basilone	SB On-ramp	60	0.04	A	380	0.25	A
	NB On-ramp	250	0.17	A	570	0.38	A
	SB Off-ramp	380	0.25	A	320	0.21	A
	NB On-ramp	330	0.22	A	120	0.08	A
2025 No Action: Buildout Circulation System with Proposed RMV Plan							
I-5 at Cristianitos	SB On-ramp	120	0.08	A	250	0.17	A
	NB On-ramp	130	0.09	A	220	0.15	A
	SB Off-ramp	160	0.11	A	130	0.08	A
	NB On-ramp	290	0.19	A	180	0.12	A
I-5 at Basilone	SB On-ramp	60	0.04	A	380	0.25	A
	NB On-ramp	250	0.17	A	570	0.38	A
	SB Off-ramp	380	0.25	A	320	0.21	A
	NB On-ramp	330	0.22	A	120	0.08	A
Preferred Alternative: Committed Circulation System with Proposed RMV Plan							
I-5 at Cristianitos	SB On-ramp	120	0.08	A	250	0.17	A
	NB On-ramp	370	0.25	A	540	0.36	A
	SB Off-ramp	210	0.14	A	220	0.15	A
	NB On-ramp	300	0.20	A	180	0.12	A
I-5 at Basilone	SB On-ramp	60	0.04	A	380	0.25	A
	NB On-ramp	250	0.17	A	570	0.38	A
	SB Off-ramp	380	0.25	A	320	0.21	A
	NB On-ramp	330	0.22	A	120	0.08	A
Preferred Alternative: Buildout Circulation System with Proposed RMV Plan							
I-5 at Cristianitos	SB On-ramp	120	0.08	A	250	0.17	A
	NB On-ramp	400	0.27	A	560	0.37	A
	SB Off-ramp	250	0.17	A	290	0.19	A
	NB On-ramp	300	0.20	A	180	0.12	A
I-5 at Basilone	SB On-ramp	60	0.04	A	380	0.25	A
	NB On-ramp	250	0.17	A	570	0.38	A
	SB Off-ramp	380	0.25	A	320	0.21	A
	NB On-ramp	330	0.22	A	120	0.08	A

NB = northbound

SB = southbound

**TABLE C**  
**COASTAL ZONE INTERSECTION CAPACITY UTILIZATION (ICU) SUMMARY**

Intersection	AM Peak Hour		PM Peak Hour	
	ICU	LOS	ICU	LOS
<b>Existing</b>				
I-5 SB Ramps and Cristianitos	0.21	A	0.28	A
I-5 NB Ramps and Cristianitos	0.25	A	0.34	A
I-5 SB Ramps and Basilone	0.30	A	0.44	A
I-5 NB Ramps and Basilone	0.24	A	0.39	A
<b>2025 No Action: Committed Circulation System with Proposed RMV Plan</b>				
I-5 SB Ramps and Cristianitos	0.21	A	0.25	A
I-5 NB Ramps and Cristianitos	0.23	A	0.34	A
I-5 SB Ramps and Basilone	0.30	A	0.44	A
I-5 NB Ramps and Basilone	0.24	A	0.39	A
<b>2025 No Action: Buildout Circulation System with Proposed RMV Plan</b>				
I-5 SB Ramps and Cristianitos	0.21	A	0.25	A
I-5 NB Ramps and Cristianitos	0.23	A	0.34	A
I-5 SB Ramps and Basilone	0.30	A	0.44	A
I-5 NB Ramps and Basilone	0.24	A	0.39	A
<b>Preferred Alternative: Committed Circulation System with Proposed RMV Plan</b>				
I-5 SB Ramps and Cristianitos	0.27	A	0.25	A
I-5 NB Ramps and Cristianitos	0.35	A	0.55	A
I-5 SB Ramps and Basilone	0.30	A	0.44	A
I-5 NB Ramps and Basilone	0.24	A	0.39	A
<b>Preferred Alternative: Buildout Circulation System with Proposed RMV Plan</b>				
I-5 SB Ramps and Cristianitos	0.24	A	0.30	A
I-5 NB Ramps and Cristianitos	0.34	A	0.54	A
I-5 SB Ramps and Basilone	0.30	A	0.44	A
I-5 NB Ramps and Basilone	0.24	A	0.39	A

NB = northbound

SB = southbound

**TABLE D**  
**COASTAL ZONE INTERSECTION DELAY SUMMARY**

Intersection	Peak Hour Volume		Stopped Delay for Vehicle (seconds)		Total Hours of Delay During Peak Hours
	AM	PM	AM	PM	
2025 No Action: Committed Circulation System with Proposed RMV Plan					
I-5 SB Ramps and Cristianitos	470	570	2	2	0.6
I-5 NB Ramps and Cristianitos	630	750	2	2	0.8
I-5 SB Ramps and Basilone	700	1,030	2	4	1.5
I-5 NB Ramps and Basilone	730	1,060	2	3	1.3
2025 No Action: Buildout Circulation System with Proposed RMV Plan					
I-5 SB Ramps and Cristianitos	470	570	2	2	0.6
I-5 NB Ramps and Cristianitos	630	740	2	2	0.8
I-5 SB Ramps and Basilone	700	1,030	2	4	1.5
I-5 NB Ramps and Basilone	730	1,060	2	3	1.3
Preferred Alternative: Committed Circulation System with Proposed RMV Plan					
I-5 SB Ramps and Cristianitos	560	730	2	3	0.9
I-5 NB Ramps and Cristianitos	990	1,240	3	7	3.2
I-5 SB Ramps and Basilone	700	1,030	2	4	1.5
I-5 NB Ramps and Basilone	730	1,060	2	3	1.3
Preferred Alternative: Buildout Circulation System with Proposed RMV Plan					
I-5 SB Ramps and Cristianitos	520	660	2	2	0.7
I-5 NB Ramps and Cristianitos	930	1,150	2	7	2.8
I-5 SB Ramps and Basilone	700	1,030	2	4	1.5
I-5 NB Ramps and Basilone	730	1,060	2	3	1.3

NB = northbound

SB = southbound